



SEQUENCE LISTING

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<120> METHODS AND COMPOUNDS FOR MODULATING MELANOCORTIN RECEPTOR LIGAND  
BINDING AND ACTIVITY

<130> 407t-980910US

<150> PCT/US99/25201

<151> 1999-10-27

<150> 60/203,271

<151> 2000-05-09

<150> 60/226,047

<151> 2000-08-16

<160> 54

<170> PatentIn version 3.0

<210> 1

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1

Met	Leu	Thr	Ala	Ala	Val	Leu	Ser	Cys	Ala	Leu	Leu	Leu	Ala	Leu	Pro
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Ala	Thr	Arg	Gly	Ala	Gln	Met	Gly	Leu	Ala	Pro	Met	Glu	Gly	Ile	Arg
			20					25					30		
Arg	Pro	Asp	Gln	Ala	Leu	Leu	Pro	Glu	Leu	Pro	Gly	Leu	Gly	Leu	Arg
		35					40					45			
Ala	Pro	Leu	Lys	Lys	Thr	Thr	Ala	Glu	Gln	Ala	Glu	Glu	Asp	Leu	Leu
	50					55					60				
Gln	Glu	Ala	Gln	Ala	Leu	Ala	Glu	Val	Leu	Asp	Leu	Gln	Asp	Arg	Glu
65					70				75						80
Pro	Arg	Ser	Ser	Arg	Arg	Cys	Val	Arg	Leu	His	Glu	Ser	Cys	Leu	Gly
				85				90						95	
Gln	Gln	Val	Pro	Cys	Cys	Asp	Pro	Cys	Ala	Thr	Cys	Tyr	Cys	Arg	Phe
			100					105					110		
Phe	Asn	Ala	Phe	Cys	Tyr	Cys	Arg	Lys	Leu	Gly	Thr	Ala	Met	Asn	Pro
		115					120					125			
Cys	Ser	Arg	Thr												
		130													

<210> 2

<211> 46

<212> PRT

<213> Homo sapiens

<400> 2

Cys	Val	Arg	Leu	His	Glu	Ser	Cys	Leu	Gly	Gln	Gln	Val	Pro	Cys	Cys
1				5					10					15	
Asp	Pro	Cys	Ala	Thr	Cys	Tyr	Cys	Arg	Phe	Phe	Asn	Ala	Phe	Cys	Tyr
			20					25					30		
Cys	Arg	Lys	Leu	Gly	Thr	Ala	Met	Asn	Pro	Cys	Ser	Arg	Thr		
		35					40					45			

<210> 3  
<211> 33  
<212> PRT  
<213> Homo sapiens

<400> 3  
Cys Val Arg Leu His Glu Ser Cys Leu Gly Gln Gln Val Pro Cys Cys  
1 5 10 15  
Asp Pro Ala Ala Thr Cys Tyr Cys Arg Phe Phe Asn Ala Phe Cys Tyr  
20 25 30  
Cys

<210> 4  
<211> 34  
<212> PRT  
<213> Artificial

<220>  
<223> synthetic mini-AGRP  
<400> 4  
Cys Val Arg Leu His Glu Ser Cys Leu Gly Gln Gln Val Pro Cys Cys  
1 5 10 15  
Asp Pro Ala Ala Thr Cys Tyr Cys Arg Phe Phe Asn Ala Phe Cys Tyr  
20 25 30  
Cys Arg

<210> 5  
<211> 34  
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<220>

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<221> MOD\_RES

<222> (1)..(1)

<223> C blocked with acetyl

<220>

<221> MOD\_RES

<222> (34)..(34)

<223> R blocked with amino

<400> 5

Cys	Val	Arg	Leu	His	Glu	Ser	Cys	Leu	Gly	Gln	Gln	Val	Pro	Cys	Cys
1				5					10					15	

Asp	Pro	Ala	Ala	Thr	Cys	Tyr	Cys	Arg	Phe	Phe	Asn	Ala	Phe	Cys	Tyr
			20					25					30		

Cys Arg

<210> 6

<211> 6

<212> PRT

<213> artificial

<220>

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<400> 6

Val	Arg	Leu	His	Glu	Ser
1				5	

<210> 7

<211> 6

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<213> Artificial

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<400> 7

Leu Gly Gln Gln Val Pro  
1 5

<210> 8

<211> 3

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<213> Artificial

<220>

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<400> 8

Arg Phe Phe  
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<210> 9

<211> 34

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<221> misc\_feature

<223> Xaa is any amino acid

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<221> misc\_feature

<222> (34)..(34)

<223> R is optional

<400> 9

Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Cys
1				5				10						15	

Asp	Pro	Xaa	Ala	Thr	Cys	Tyr	Cys	Xaa	Xaa	Xaa	Asn	Ala	Phe	Cys	Tyr
			20					25					30		

Cys Arg

<210> 10

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<223> Xaa is any amino acid

<400> 10

Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
1				5	

<210> 11

<211> 6

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<223> Xaa is any amino acid

<400> 11

Val Xaa Xaa Xaa Xaa Xaa  
1 5

<210> 12

<211> 6

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<223> Xaa is any amino acid

<400> 12

Xaa Arg Xaa Xaa Xaa Xaa  
1 5

<210> 13

<211> 6

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<223> Xaa is any amino acid

<400> 13

Xaa Xaa Leu Xaa Xaa Xaa  
1 5

<210> 14

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<223> Xaa is any amino acid

<400> 14

Xaa Xaa Xaa His Xaa Xaa  
1 5

<210> 15

<211> 6

<212> PRT

<213> Artificial



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<223> Xaa is any amino acid

<400> 15

Xaa Xaa Xaa Xaa Xaa Ser  
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<210> 16

<211> 6

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<223> Xaa is any amino acid

<400> 16

Val Arg Xaa Xaa Xaa Xaa  
1 5

<210> 17

<211> 6

<212> PRT

<213> Artificial

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<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 17

Val Xaa Leu Xaa Xaa Xaa  
1 5

<210> 18

<211> 6

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<223> AGRP fragment

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<223> Xaa is any amino acid

<400> 18

Val Xaa Xaa His Xaa Xaa  
1 5

<210> 19

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<223> Xaa is any amino acid

<400> 19

Val Xaa Xaa Xaa Glu Xaa  
1 5

<210> 20

<211> 6

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<223> Xaa is any amino acid

<400> 20

Val Xaa Xaa Xaa Xaa Ser  
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<210> 21

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<223> Xaa is any amino acid

<400> 21

Xaa Arg Leu Xaa Xaa Xaa  
1 5

<210> 22

<211> 6

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<223> Xaa is any amino acid

<400> 22

Xaa Arg Xaa His Xaa Xaa  
1 5

<210> 23

<211> 6

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<223> Xaa is any amino acid

<400> 23

Xaa Arg Xaa Xaa Glu Xaa  
1 5

<210> 24

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<223> Xaa is any amino acid

<400> 24

Xaa Arg Xaa Xaa Xaa Ser  
1 5

<210> 25

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<223> Xaa is any amino acid

<400> 25

Xaa Xaa Leu His Xaa Xaa  
1 5

<210> 26

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<223> Xaa is any amino acid

<400> 26

Xaa Xaa Leu Xaa Xaa Xaa  
1 5

<210> 27

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<223> Xaa is any amino acid

<400> 27

Xaa Xaa Leu Xaa Glu Xaa  
1 5

<210> 28

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 28

Xaa Xaa Leu Xaa Xaa Ser  
1 5

<210> 29

<211> 6

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<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 29

Xaa Xaa Xaa His Glu Xaa  
1 5

<210> 30

<211> 6

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 30

Xaa Xaa Xaa His Xaa Ser  
1 5

<210> 31

<211> 6

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<223> Xaa is any amino acid

<400> 31

Xaa Xaa Xaa Xaa Glu Ser  
1 5



<210> 32

<211> 6

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<223> Xaa is any amino acid

<400> 32

Val Arg Leu Xaa Xaa Xaa  
1 5

<210> 33

<211> 6

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<223> AGRP fragment

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<223> Xaa is any amino acid

<400> 33

Val Xaa Leu His Xaa Xaa  
1 5

<210> 34

<211> 6

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<223> Xaa is any amino acid

<400> 34

Val Arg Leu His Glu Ser  
1 5

<210> 35

<211> 6

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<223> Xaa is any amino acid

<400> 35

Xaa Xaa Xaa Xaa Xaa Xaa  
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<210> 36

<211> 6

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<223> Xaa is any amino acid

<400> 36

Leu Gly Gln Gln Val Pro  
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<210> 37

<211> 6

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<223> Xaa is any amino acid

<400> 37

Leu Xaa Xaa Xaa Xaa Xaa  
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<210> 38

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<223> Xaa is any amino acid

<400> 38

Xaa Gly Xaa Xaa Xaa Xaa  
1 5

<210> 39

<211> 6

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<223> Xaa is any amino acid

<400> 39

Xaa Xaa Gln Xaa Xaa Xaa  
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<210> 40

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<223> Xaa is any amino acid

<400> 40

Xaa Xaa Xaa Gln Xaa Xaa  
1 5

<210> 41

<211> 6

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<223> Xaa is any amino acid

<400> 41

Xaa Xaa Xaa Xaa Val Xaa  
1 5

<210> 42

<211> 6

<212> PRT

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<223> Xaa is any amino acid

<400> 42

Xaa Xaa Xaa Xaa Xaa Pro  
1 5

<210> 43

<211> 6

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<223> Xaa is any amino acid

<400> 43

Leu Gly Xaa Xaa Xaa Xaa  
1 5

<210> 44

<211> 6

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<223> Xaa is any amino acid

<400> 44

Leu Xaa Gln Xaa Xaa Xaa  
1 5

<210> 45

<211> 6

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<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 45

Leu Xaa Xaa Gln Xaa Xaa  
1 5

<210> 46

<211> 6

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<213> Artificial

<220>

<223> AGRP fragment

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<223> Xaa is any amino acid

<400> 46

Leu Xaa Xaa Xaa Val Xaa  
1 5

<210> 47

<211> 6

<212> PRT

<213> Artificial

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<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 47

Leu Xaa Xaa Xaa Xaa Pro  
1 5

<210> 48

<211> 6

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment



<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 48

Leu Gly Gln Xaa Xaa Xaa  
1 5

<210> 49

<211> 3

<212> PRT

<213> Artificial

<220>

<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 49

Arg Xaa Xaa  
1

<210> 50

<211> 3

<212> PRT

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<220>

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 50

Xaa Phe Xaa

1

<210> 51

<211> 3

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<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 51

Arg Phe Xaa

1

<210> 52

<211> 3

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<223> Xaa is any amino acid

<400> 52

Arg Xaa Phe

1

<210> 53

<211> 3

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<220>

<223> AGRP fragment

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<221> misc\_feature

<223> Xaa is any amino acid

<400> 53

Xaa Phe Phe

1

<210> 54

<211> 6

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<223> Xaa is any amino acid

<400> 54

Arg Phe Phe Asn Ala Phe  
1 5